

INDUSTRIAL MECHANICS AND MAINTENANCE TECHNOLOGY APPRENTICESHIP, CERTIFICATE

Program Description

Oregon Bureau of Labor and Industries – Apprenticeship Training Division (BOLI-ATD) and local Trade Apprenticeship Training Committee (TATC) trade-specific standards of apprenticeship control the training. This program is restricted to BOLI-ATD registered apprentices. Therefore, this is a closed enrollment program and not available to the general student population.

Apprenticeship training is an earn-while-you-learn program. The apprentice is an employee and earns a wage while receiving on-the-job training and attending related training classes. An approved training agent selects apprentices through a competitive bid process from current employees. The apprentice connects to the TATC after selection through the indenture (registration) process. Local TATCs representing labor and management work with the College to implement the apprenticeship programs. Every six months the TATC reviews and evaluates each apprentice's progress.

The apprenticeship model provides statewide transfer opportunities, ladder-type Certificates of Completion, Associate of Applied Science degrees and an optional transfer path into a Bachelor of Applied Science degree in Technology and Management at Oregon Institute of Technology.

The BOLI-ATD website oregon.gov/boli/atd/ (<http://oregon.gov/boli/atd/>) provides more information about apprenticeship and statewide opportunities.

Umpqua Community College offers three 8,000-hour BOLI-ATD registered apprenticeships in partnership with Douglas Coos Curry TATC and BOLI-ATD.

- Industrial Fabricator/Welder
- Industrial Maintenance Machinist
- Industrial Maintenance Millwright

Program Outcomes

This apprenticeship program provides specialized training for apprentices registered with BOLI-ATD as Industrial Fabricator/Welder, Industrial Maintenance Machinist, or Industrial Maintenance Millwright apprentices. The Oregon State Standard for each trade aligns the course of study.

Successful completion of required courses must be with at least a "C" grade. Each apprentice student earns a trade-specific Oregon State Journeyman Card upon successful completion.

Students will:

1. Demonstrate knowledge of machinery operation and maintenance
2. Demonstrate fabrication techniques
3. Demonstrate mathematics of the trade

4. Demonstrate safe working practices in accordance with state and federal regulations

Career Considerations

The Industrial Maintenance program prepares students for advanced-level jobs and journeyman careers in the following areas:

- Journeyman Fabricator/Welder
- Journeyman Industrial Maintenance Machinist
- Journeyman Industrial Maintenance Millwright

Program Course Requirements

| Course | Title | Credits |
|--------------------|-------------------------------|----------|
| First Year | | |
| First Term | | |
| APR 120 | Industrial Safety | 3 |
| APR 140 | Beg Welding for Apprentices | 1 |
| Credits | | 4 |
| Second Term | | |
| APR 141 | Int Welding for Apprentices | 1 |
| MTH 052 | Industrial Applications-MTH | 4 |
| Credits | | 5 |
| Third Term | | |
| APR 130 | Mech Principles-Drive Designs | 3 |
| MTH 075 | Applied Geometry | 3 |
| Credits | | 6 |
| Second Year | | |
| First Term | | |
| APR 131 | Basic Metallurgy | 3 |
| SDP 113 | Human Relations-Supervisors | 3 |
| Credits | | 6 |
| Second Term | | |
| APR 145 | Blueprint Reading-Sketching | 3 |
| WR 115 | Intro to Expos Writing | 4 |
| Credits | | 7 |
| Third Term | | |
| APR 228 | Rigging Fundamentals | 3 |
| Credits | | 3 |
| Third Year | | |
| First Term | | |
| APR 115 | Computer Aided Drafting I | 3 |
| CIS 120 | Intro to Digital Literacy | 4 |
| Credits | | 7 |
| Second Term | | |
| APR 111 | Machine Shop Practices I | 3 |
| Credits | | 3 |
| Third Term | | |
| APR 112 | Machine Shop Practices II | 3 |
| Credits | | 3 |
| Fourth Year | | |
| First Term | | |
| APR 121 | Hydraulics I | 3 |
| APR 229 | Basic Pneumatics | 3 |
| Credits | | 6 |
| Second Term | | |
| APR 122 | Hydraulics II | 3 |
| Credits | | 3 |

Third Term

| | | |
|---------|------------------------------|-----------|
| APR 123 | Hydraulics III | 3 |
| | Credits | 3 |
| | Total Minimum Credits | 56 |

Advising Notes

- See advisor for full list of elective options and program requirements

Program Entrance Requirements

- TATC Approval
- CPR/First Aid certification is required for entry.